

REMARKS

I. Introduction

This amendment is filed in response to the March 29, 2004 Final Office Action. With the cancellation of claims 15 and 26 without prejudice herein, claims 11 to 14, 16 to 25 and 27 to 30 are pending in the present application. Claims 11 to 17, 19, 22 to 28 and 30 stand rejected. In view of the preceding amendments and following remarks, it is respectfully submitted that claims 11 to 14, 16 to 25 and 27 to 30 are allowable and reconsideration is respectfully requested.

II. Claim for Foreign Priority

The Office Action acknowledges the claim for foreign priority in the present application, however a certified copy of the German application was requested.

Applicants hereby submit a certified copy of the German application. Applicants respectfully submit that all requirements for obtaining foreign priority have satisfied and Applicants respectfully request acknowledgement of the claim for foreign priority.

III. Rejection of Claims 11, 13 to 16, 22, 23, 25 to 27 and 30 Under 35 U.S.C. §103(a)

Claims 11, 13 to 16, 22, 23, 25 to 27 and 30 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 2,730,744 ("Vaughn") in view of U.S. Patent No. 3,224,025 ("Altrock et al."). Applicants respectfully submit that the combination of Vaughn and Altrock et al. does not render obvious claims 11, 13 to 16, 22, 23, 25 to 27 and 30 for the following reasons.

Claim 11 relates to a floor mop. Claim 11 recites two carrier plates connected to a common carrier center piece in jointed manner and which carry an absorbent mop covering, a mop handle affixed on the carrier center piece, and a wringer slide which is movable along the mop handle, the wringer slide having two rigid wringer arms, each of which is movably engagable with a back of one of the two carrier plates. Claim 11 also recites that the mop handle (1) is connected with the carrier center piece (3) by way of a cardan joint (2), and ends (11a) of the wringer arms (11) can each be brought into engagement with a guide surface (17) on the back of the carrier plate (5) assigned to them, in each instance, and the

wringer slide (9) is guided on the mop handle (1) so that it cannot rotate, wherein the arms move into and out of engagement with the carrier plates. Claim 11 has been amended such that the ends of the arms are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. Support for the amendment to claim 11 may be found, for example, in originally filed Figure 4.

Claim 22 also relates to a floor mop. Claim 22 recites a common carrier center piece, two carrier plates connected to the carrier center piece, a mop covering supported by the carrier plates, a mop handle and a joint arrangement configured to connect the mop handle to the carrier center piece. Claim 22 also recites a wringer slide guideably moveable along the mop handle, the wringer slide having two wringer arms movably engagable with respective backs of the carrier plates; wherein the joint arrangement is configured to permit the carrier center piece to pivot to all sides and is configured to prevent the carrier center piece from rotating, wherein the arms move into and out of engagement with the carrier plates. Claim 22 has been amended such that the ends of the arms are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. Support for the amendment to claim 22 may be found, for example, in Figure 4.

Claim 30 also relates to a floor mop. Claim 30 recites a common carrier center piece, two carrier plates connected to the carrier center piece, a mop covering supported by the carrier plates, a mop handle and a wringer slide guideably moveable along the mop handle, the wringer slide having two wringer arms movably engagable with respective backs of the carrier plates. Claim 30 further recites means for connecting the mop handle to the carrier center piece to permit the carrier center piece to pivot to all sides and to prevent the carrier center piece from rotating, wherein the arms move into and out of engagement with the carrier plates. Claim 30 has been amended such that the ends of the arms are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged

from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. Support for the amendment to claim 30 may be found, for example, in Figure 4.

Vaughn provides a set of rollers 50 which are engaged on an inclined wedge or cam 34. Col. 3, lines 28 to 30. The rollers travel from a contact position in the extended mop position, (Fig. 8), to a contacting position on the upper part of the wedges 51 in a mop closed position (Fig. 10). At no time do the rollers move into and out of engagement with carrier plates, as required in amended independent claims 11, 22 and 30. Vaughn additionally provides that the rollers 50 are “retained” in alignment with the cams 34. Col. 2, lines 67 to 70. Moreover, the rollers travel longitudinally along the pressure plates 28 and engage the cams to such an extent that a closed position is reached. Col. 3, lines 52 to 57. As the rollers are required to continually contact the cams to provide the closure force for the mop and the drawings always provide a contact between the rollers and the pressure plates 28, Vaughn does not disclose or suggest arms that move into and out of engagement with the carrier plates.

Vaughn also does not disclose or suggest that the arms are configured such that ends of the arms are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. Vaughn always maintains contact between the rollers and the cams 34.

The addition of Altrock does not cure the defects of Vaughn. Altrock allegedly provides a scrubbing and polishing device. Altrock does not provide any disclosure or suggestion of ends of the arms that are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. Altrock, as provided in Figures 5 and 6, provide a scrubbing and polishing device where rollers are simultaneously engaged.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish prima facie obviousness, three criteria must be satisfied. First, there must be some

suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim limitations. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

As provided above, the combination of references do not disclose or suggest ends of arms that are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. As the combination of references do not disclose or suggest the features of independent claims 11, 22 and 30, Applicants respectfully request withdrawal of the rejections to independent claims 11, 22 and 30.

Claims 15 and 26 have been canceled without prejudice rendering the rejection moot for these claims. Claims 13, 14 and 16 ultimately depend from claim 11 and therefore include all of the limitations of claim 11. Claims 13, 14 and 16 should be patentable for at least the reasons presented in relation to claim 11. Claims 23, 25 and 27 depend from claim 22 and therefore include all of the limitations of claim 22. Claims 23, 25 and 27 should be patentable for at least the reasons presented in relation to claim 22.

IV. Rejection of Claims 12, 19 and 24 Under 35 U.S.C. §103(a)

Claims 12, 19 and 24 were rejected under 35 U.S.C. § 103(a) as unpatentable over Vaughn in view of Altrock et al. and further in view of U.S. Patent No. 5,272,783 ("Richardson et al."). Applicants respectfully submit that the combination of references does not render obvious claims 12, 19 and 24 for the following reasons.

Claim 12 depends from claim 11 and therefore includes all of the features of independent claim 11.

Claim 19 relates to a floor mop. Claim 19 recites two carrier plates connected to a common carrier center piece in jointed manner and which carry an

absorbent mop covering, a mop handle affixed on the carrier center piece, and a wringer slide which is movable along the mop handle, the wringer slide having two rigid wringer arms, each of which is movably engagable with a back of one of the two carrier plates. Claim 19 further submits that the mop handle (1) is connected with the carrier center piece (3) by way of a cardan joint (2), and ends (11a) of the wringer arms (11) can each be brought into direct contact with a guide surface (17) on the back of the carrier plate (5) assigned to them, in each instance, and the wringer slide (9) is guided on the mop handle (1) so that it cannot rotate. Claim 19 further recites that the end (11a) of each wringer arm (11) has a pressure surface (16) with a convex curvature. Claim 19 has been amended such that the ends of the arms are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. Support for the amendment may be found, for example, in Figure 4.

Claim 24 depends from claim 22 and therefore includes all of the features of amended claim 24.

The addition of Richardson et al. does not cure the defects of the Vaughn and Altrock references. Richardson et al. allegedly provide a butterfly mop structure. Title. Feet 68 of the legs, 64 and 66 engage the top surface of the wing members adjacent to hinges 48. Col. 5, lines 1 to 3. As provided in the first mop structure embodiment, the feet 68 always engage the top surface. There is no disclosure or suggestion of arms which move into and out of engagement with the carrier plates or the ends of the arms are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. In a second embodiment, retraction members 100 are connected to the top of the wing members 44. In all embodiments illustrated and described, Richardson et al. fail to provide arms which move into and out of engagement with the carrier plates or that the ends of the arms are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the

back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate.

As the combination of references fails to disclose or suggest the features of claims 12, 19 and 24, which all require the ends of the arms are configured with roller elements such that each of the roller elements contacts the back of one of the two carrier plates and each of the roller elements may independently be disengaged from the back of the carrier plate while another of the roller elements is engaged on the back of the carrier plate. Applicants respectfully submit that the rejections to claims 12, 19 and 24 should be withdrawn.

V. Rejection of Claims 17 and 28 Under 35 U.S.C. §103(a)

Claims 17 and 28 were rejected under 35 U.S.C. § 103(a) as unpatentable over Vaughn in view of Altrock et al. in further view of U.S. Patent No. 6,330,084 ("Chiang"). Applicants respectfully submit that the combination of references does not render obvious claims 17 and 28 for the following reasons.

Claim 17 depends from claim 11 and therefore includes all of the features of independent claim 11.

Claim 28 depends from claim 22 and therefore includes all of the features of independent claim 22.

The Office Action merely uses Chiang to provide an alleged teaching that either roller balls or roller wheels may be used as supporting contact elements. Office Action page 7. Applicants respectfully submit that the addition of Chiang does not cure the defects of Vaughn and Altrock et al. Chiang relates to a flatbed scanner with a self-driven scanning module.

As an initial matter, Applicants respectfully submit that Chiang provides a patent date of December 11, 2001. The current Application provides a filing date of November 26, 2001 thereby predating the Chiang reference. For this reason alone, Applicants respectfully submit that the combination of references is defective and as a result the rejection should be withdrawn.

The addition of Chiang does not cure the critical defects of Vaughn and Altrock et al. Chiang presents two roller balls 102 which are installed at one end of a scanning module. The roller balls 102 are installed at front and rear sides under one end of a scanning module. Col. 3, lines 62 to 67. The roller balls can also be replaced by two roller wheels. Col. 4, lines 6 to 8. Chiang always provides roller



balls or wheels that specifically engage a sliding groove 104. Chiang does not disclose or suggest any configuration of roller balls or wheels that independently disengage contact from the sliding groove 104, rather Chiang always provides a configuration wherein the roller balls are engaged for smooth translation of the scanning module 18. The combination of references fails to provide for the features of claims 17 and 28. Applicants respectfully request withdrawal of the rejections to claims 17 and 28.

VI. Allowance of Claims 18, 20, 21 and 29

Applicant acknowledges the allowance of claims 18, 20, 21 and 29.

VII. Conclusion

It is therefore respectfully submitted that all pending claims are allowable. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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